

ROBOTIC SACROCOLPOPEXY WITH ANTERIOR AND POSTERIOR MESH PLACEMENT:

FOLLOWING THE LEARNING CURVE OF A SINGLE
LAPAROSCOPIC EXPERIENCED SURGEON IN A TERTIARY
CENTER

Caceiro R¹, Ferronha F¹, Gil M¹, Cunha J¹, Silva P¹, Gomes
A¹, Brito Lança M¹, Meireles A¹, Pereira P¹, Campos
Pinheiro L¹

1. ULS São José, Lisbon, Portugal

**“RASC is safe and effective
with a small learning curve
for previously experienced
laparoscopic surgeons.”**

Hypothesis

Evaluate the **learning curve of robotic sacrocolpopexy** (RASC) in a tertiary center.

Assess operative time, complication rates, surgical success, and patient-reported outcomes (PROs).

Performed by a laparoscopy-experienced surgeon with no prior RASC experience.

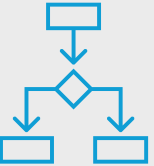


Methods

Retrospective cohort, 23 consecutive patients, 12-month follow-up.

Endpoints:

- Objective surgical success (POP-Q)
- Operative time, blood loss, length of stay
- Complications \geq Clavien-Dindo II
- Mesh-related complications, reinterventions
- Subjective success (PFIQ-7)



KEY RESULTS

Surgical success at 12 months:



100%

Mean operative time:

198 min \rightarrow decreased significantly
after 4th case (CUSUM analysis)



Blood loss: 57,8 mL



Hospital stay: 1.17 days



Complications:

8.68% (1 bladder injury, 1 vaginal
injury); no bowel injuries, mesh
issues, or reinterventions



PFIQ-7 score at 12

months: 36.27
(improved QoL across all
domains)

Interpretation

Learning curve did not affect core outcomes ($p > 0.05$)
surgical success, blood loss, length of stay,
complication profile.

Rapid transition from laparoscopy to robotics:
operative times stabilized after only 4 cases.

Safety maintained throughout the learning phase: no
major complications or reoperations.

Patient-reported outcomes improved significantly,
confirming clinical benefit.

Take-Home Message

1. RASC is **safe and effective** even in the early learning curve.
2. **Quick adaptation** by a laparoscopic-experienced surgeon.
3. **Improved quality of life** confirmed by Patient Reported Outcomes.
4. Findings support wider adoption of RASC in specialized centers.